Claim Amendments

1. (Currently Amended) A method for verifying a location of an area of interest within a sample, the method comprising ~~the steps of~~:

a) locating a datum mark on the sample;

b) identifying the area of interest within the sample;

c) determining the location of the area of interest relative to the mark; and

d) <u>re</u>locating ~~again~~ the datum, wherein the location of the area of interest is verified if a dimensional error in locating the datum ~~in step d~~ relative to ~~step a~~ <u>relocating the datum</u> is less than a tolerance value.

2. (Currently Amended) The method ~~of~~ <u>according to</u> claim 1 wherein the ~~step of identifying~~ <u>identification of</u> the area of interest within the sample comprises ~~the step of~~ optically scanning the sample.

3. (Original) The method according to claim 1 wherein the tolerance value is between about ten microns and one thousand microns.

4. (Currently Amended) The method according to claim 1 further comprising ~~the steps of~~:

identifying a plurality of areas of interest within the sample; and

ranking the plurality of areas of interest in an order.

5. (Original) The method according to claim 1 wherein the sample comprises a cytological specimen deposited on a slide.

6. (Original) The method according to claim 5 wherein the area of interest within the sample comprises an abnormal cell.

7. (Original) The method according to claim 1 wherein the sample is mounted on a stage.

8. (Currently Amended) The method according to claim 1 further comprising ~~the step of~~ rejecting the sample if the location of the area of interest is not verified.

9. (Currently Amended) The method according to claim 1 further comprising ~~the step of~~ placing a visible indicator proximate the area of interest identified within the sample.

10. (Currently Amended) A method for verifying a location of an area of interest within a sample, the method comprising ~~the steps of~~:

a) locating a datum mark on the sample;

b) assigning a reference coordinate value to a location of the mark;

c) identifying an area of interest within the sample;

d) assigning a coordinate value to the location of the area of interest; and

e) spatially locating the mark, thereby determining a spatial offset value of the mark relative to the reference coordinate value;

wherein the location of the area of interest is verified if the spatial offset value is less than a tolerance value.

11. (Currently Amended) The method according to claim 10 wherein the ~~step of~~ first locating of the datum mark comprises ~~the step of~~ centering the mark in a field of view of an optical instrument.

12. (Currently Amended) The method of claim 10 further comprising ~~the step of~~ storing in memory the coordinate value of the area of interest.

13. (Currently Amended) The method according to claim 10 further comprising ~~the steps of~~:

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a) transferring the sample to a review station;

b) locating the datum mark; and

c) setting a coordinate system of the review station based on a location of the mark.

14. (Currently Amended) A method for verifying a location of an area of interest within a cytological specimen on a slide located in an automated cytological imaging system, the method comprising the steps of:

a) placing the slide within an optical path of the imaging system;

b) centering a datum mark on the slide within a field of view of the imaging system;

c) assigning a reference coordinate value to a location of the mark;

d) storing in memory the reference coordinate value;

e) scanning the specimen to identify an area of interest within the specimen;

f) centering the area of interest within the field of view of the imaging system;

g) assigning a coordinate value to the area of interest;

h) returning to the reference coordinate value location;

i) spatially locating the mark; and

j) comparing the reference coordinate value to a coordinate value resulting from step i spatially locating the mark, thereby determining a spatial offset value of the mark, wherein the location of the area of interest is verified if the spatial offset value is less than a tolerance value.

Claims 15-19 (Cancelled)

20. (Currently Amended) An imaging system for verifying a location of an area of interest within a sample, the imaging system comprising:

a) an optical system; and

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b) a stage movable relative to the optical system, at least one of the optical system and the stage being operable to position the sample in an optical path of the optical system,

wherein the imaging system is capable of spatially locating a datum mark on the sample and determining a spatial offset of the mark relative to a nominal position thereof.

21. (Original) The imaging system according to claim 20 wherein the sample is a cytological specimen deposited on a slide.

Claim 22. (Cancelled)

23. (Newly Added) The method of claim 14, wherein the method is performed while the slide is continuously mounted within the imaging system.

24. (Newly Added) A method for verifying a location of an area of interest within a cytological specimen on a slide located in an automated cytological imaging system, the method comprising:

locating a datum mark on the sample;

identifying the area of interest within the sample;

determining the location of the area of interest relative to the mark; and

relocating the datum, wherein the location of the area of interest is verified if a dimensional error in locating the datum relative to relocating the datum is less than a tolerance value.

25. (Newly Added) The method of claim 24, wherein the method is performed while the slide is continuously mounted within the imaging system.